

REMARKS

Claims 10 and 11 stand rejected under 35 USC 102(e) as being anticipated by U.S. Patent Publication No. 2003/0124326 (hereinafter Nakatani). This rejection is respectfully traversed.

Claim 10 claims a method of manufacturing a conductive substrate having a lead frame provided on one surface of an insulator sheet and a radiation plate provided on the other surface of the insulator sheet. A part of the lead frame extends to an end portion of the insulator sheet and an end portion of the radiation plate near an end portion of the insulator sheet is removed.

As shown in Fig. 13, and as described on page 2 of the specification, when both the lead frame 800 and the radiation plate 802 extend to the end of an insulator sheet 801, a discharge can occur at the end of the insulator sheet 801. This is because the non-insulated distance between the lead frame 800 and the radiation plate 802 at the edge of the insulator sheet 801 can be quite small (see specification page 2, lines 20-22). Electrical discharge between the lead frame 800 and the radiation plate 802 can occur across this small gap at the edge of the insulator sheet 801, which can damage the substrate (see specification page 2, lines 16-18).

In the claimed invention, the creeping distance between the lead frame and the radiation plate are increased by removing the end portions of the radiation plate that extends to the end of the insulator sheet. This is described on page 12, lines 1-6, and page 12, lines 21-24, and shown in Figs. 4C and 5C. By positioning the end portion of the radiation plate away from the end portion of the insulating sheet as claimed, electrical discharge between the lead frame and the radiation plate can be inhibited (see specification page 4, lines 8-11).

The Nakatani reference does not disclose the claimed method. Specifically, the Examiner states that Figs. 4A-F show a lead 404 on one side of an insulating sheet and a plate 405 on the other surface of the insulating sheet. This is incorrect. As described in paragraph [0087], Figs. 4A to 4F describe a method of forming a thermally conductive substrate having a double-sided

wiring pattern. Accordingly, no radiation plate appears on either side of the substrate. 404 represents a metallic foil that is processed to form wiring patterns 405 on both sides of the substrate. Further, none of Figs. 4A-4F show both a lead frame that extends to the edge and an end portion of an insulating plate that is located near an end portion of the insulator sheet is removed.

Since the Nakatani fails to disclose or suggest the invention as claimed in claim 10, the rejection of claim 10 should be withdrawn. The rejection of claim 11, which depends from claim 10, should be withdrawn for at least the same reasons.

Further, Applicants have included herewith a Statement of Common Ownership. This statement disqualifies the Nakatani reference as a 103 reference under 103(c). Accordingly, claims 10 and 11 are not obvious in view of Nakatani for this additional reason.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing Attorney Docket No. 514392000110.

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Respectfully submitted,

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